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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,171	06/04/2007	Stefan Geoffrey Butlin	051034	1927
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QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121			EXAMINER	
			TILLERY, RASHAWN N	
ART UNIT		PAPER NUMBER		
		2174		
NOTIFICATION DATE		DELIVERY MODE		
12/02/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/598,171	<b>Applicant(s)</b> BUTLIN ET AL.
	<b>Examiner</b> RASHAWN TILLERY	<b>Art Unit</b> 2174

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 03 September 2009.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,3-12 and 14-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,3-12 and 14-29 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/06)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

1. This communication is responsive to the Amendment filed 9/3/2009.
2. Claims 1, 3-12 and 14-29 are pending in this application. Claims 1, 12, 24 and 25 are independent claims. This action is made Final.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
4. Claims 1, 3, 10-12, 14 and 21-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Son et al ("Son" US 2002/0041292) in view of Aberg (US 6993362) in further view of Will (US 6392640).

Regarding claim 1, Son discloses, figures 4a-c, a method of displaying a subset of a plurality of user interface elements in a user interface, the method comprising the steps of:

(i) determining the size of a first subset of plurality of UI elements that can be displayed within the user interface (examiner notes that the size of the "Message menu" shown in figure 4a is directly proportionate to the size of the display screen);

(ii) determining a plurality of UI elements that may be selected for display within the user interface (see figs 4a-c where the “message menu” and “call option menu” are shown; either may be selected);

(iii) selecting the first subset of UI elements from the plurality of UI elements determined in step (ii) (see paragraphs [0024]-[0025] and [0031]; examiner notes that user may scroll through the menu elements to select a desired menu); and

(iv) displaying the first subset of UI elements selected in step (iii) (see fig 4b where portions of the “message menu” and “call option menu” are shown).

Son does not explicitly disclose as the first subset of UI elements is unselected, the first subset of UI elements are not displayed, and a second subset of UI elements are displayed according to steps (i) through (iv) as performed for the first subset of UI elements. However, Aberg teaches a mobile telephone capable of creating a dynamic menu by selectively adding and removing menu items (see col. 6, lines 6-49 and claim 1 where the memory containing a dynamic menu is discussed). It would have been obvious to an artisan at the time of the invention to include Aberg's teachings into Son's user interface in an effort to increase user operability by creating an easily accessible sub-menu that contains frequently used menu items.

Neither Son nor Aberg expressly disclose that the first subset of UI elements are unloaded from memory upon being unselected. However, Will discloses a cellular telephone capable of accessing a remote server database of menu items. In one embodiment of the invention, upon user request, the menu items stored on the server database can be transmitted to user's cellular phone (see col. 3, lines 6-16). It would

have been obvious to an artisan at the time of the invention to include Will's teachings in the modified Son's user interface in an effort to minimize the memory requirements in the cellular telephone.

Regarding claim 3, the modified Son teaches the user input comprises activating a user input means and the selection and display of a further subset of UI elements causes a list or menu to be scrolled (see Son paragraphs [0024]-[0025] and [0031]; examiner notes that user may scroll through the menu elements to select a desired menu).

Regarding claim 10, the modified Son teaches the list of the selected subset of UI elements comprises one or more further lists, each of the one or more further lists being identified by a unique expression (see Aberg fig 3 and col. 7, lines 25-29 where it is discussed that a dynamic menu can be located as a sub-menu of a sub-menu)

Regarding claim 11, the modified Son teaches a data carrier comprising computer executable code for performing the method of any of claims 1 to 9 (see Son fig 1 and paragraph [0006] where the memory of the mobile phone for storing various programs is discussed).

Claims 12 and 14 are similar in scope to claims 1 and 3 respectively, and are therefore rejected under similar rationale.

Claim 21 is similar in scope to claim 10 and is therefore rejected under similar rationale.

Regarding claim 22, the modified Son teaches the device comprises wireless communication means (see Son fig 1).

Regarding claim 23, the modified Son teaches, in fig 1 of Son, a device comprising processing means (10), storage means (50), a display (40), user input means (60), wireless communication means (20) and a user interface (30), wherein the device is configured to perform the method of any of claims 1 to 10.

Claim 24 is similar in scope to claim 1 and is therefore rejected under similar rationale.

Claim 25 is similar in scope to claim 1 and is therefore rejected under similar rationale.

Regarding claim 26, the modified Son discloses the plurality of UI elements contains images and text strings operable to display a menu, and the first subset of UI elements contains a first image and a first text string chosen from the plurality of UI elements, the first image and the first text string operable to display a menu entry on the user interface (see Son figs 4a-c where the “message menu” and “call option menu” are shown).

Claims 27-29 are similar in scope to claim 26 and are therefore rejected under similar rationale.

**4. Claims 4-9 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Son in view of Aberg in further view of Will in further view of Kennedy et al (“Kennedy” EP 1193590).**

Regarding claims 4 and 15, Son discloses the plurality of UI elements are stored in a single file (see fig 1, #50). The modified Son does not explicitly reveal that a mark-

Art Unit: 2174

up language component is provided that defines the location of the plurality of UI elements. However, such a feature is well known in the art. For instance, Kennedy teaches the use of a markup language for customizing the display of a mobile device (see paragraphs [0029]-[0033]). It would have been obvious to an artisan at the time of the invention to modify Son's user interface by including Kennedy's teachings in an effort to provide a mobile computing device in a manner that conserves power resources.

Regarding claims 5 and 16, the modified Son does not explicitly disclose the mark-up language component further defines the display of the selected subset of UI elements in a list. However, such a feature is well known in the art. For instance, Kennedy teaches the use of a markup language for customizing the display of a mobile device (see paragraph [0029] where display options is discussed). It would have been obvious to an artisan at the time of the invention to modify Son's user interface by including Kennedy's teachings in an effort to provide a mobile computing device in a manner that conserves power resources.

Regarding claims 6 and 17, the modified Son does not explicitly disclose a template is associated with the mark-up language component, the template determining the appearance of the selected subset of UI elements displayed in the list. However, such a feature is well known in the art. For instance, Kennedy teaches the use of a markup language for customizing the display of a mobile device (see paragraph [0029] where display options is discussed). It would have been obvious to an artisan at the time of the invention to modify Son's user interface by including Kennedy's teachings in

Art Unit: 2174

an effort to provide a mobile computing device in a manner that conserves power resources.

Regarding claims 7 and 18, Son discloses the plurality of UI elements are stored in a single file (see fig 1, #50). Son does not explicitly reveal that a mark-up language component is provided that defines the location of the file and the file comprises one or more data resources for display in the user interface. For instance, Kennedy teaches the use of a markup language for customizing the display of a mobile device (see paragraphs [0029]-[0033]). It would have been obvious to an artisan at the time of the invention to modify Son's user interface by including Kennedy's teachings in an effort to provide a mobile computing device in a manner that conserves power resources.

Regarding claims 8 and 19, the modified Son does not explicitly disclose the mark-up language component further defines the display of the selected subset of UI elements in a list. However, such a feature is well known in the art. For instance, Kennedy teaches the use of a markup language for customizing the display of a mobile device (see paragraph [0029] where display options is discussed). It would have been obvious to an artisan at the time of the invention to modify Son's user interface by including Kennedy's teachings in an effort to provide a mobile computing device in a manner that conserves power resources.

Regarding claims 9 and 20, the modified Son does not explicitly disclose a template is associated with the mark-up language component, the template determining the appearance of the selected subset of UI elements displayed in the list. However, such a feature is well known in the art. For instance, Kennedy teaches the use of a

markup language for customizing the display of a mobile device (see paragraph [0029] where display options is discussed). It would have been obvious to an artisan at the time of the invention to modify Son's user interface by including Kennedy's teachings in an effort to provide a mobile computing device in a manner that conserves power resources.

***Response to Arguments***

5. Applicant's arguments filed 9/3/2009 have been fully considered but they are not persuasive.

Regarding Applicant's arguments concerning Son failing to disclose determining the size of a first subset of plurality of UI elements that can displayed within the user interface, the Examiner respectfully disagrees.

Son discloses displaying a Message menu in Fig 4A, portions of the Message menu and a Call Option menu in Fig 4B and the entire Call Option menu in Fig 4C. The two menus comprise the claimed "first subset of plurality of UI elements." The size of the subset that can be displayed within the user interface is explicitly shown in the Figs as described above. For example, if the size of the subset were determined to be smaller than the size described above, both menus would be displayed on the screen simultaneously; and if the size were determined to be larger, the menus would be displayed on the screen sequentially. However, in this particular instance, the determined size of Son's subset displays the menus such that the Message menu is

displayed, portions of the Message menu and a Call Option menu are displayed and the entire Call Option menu is then displayed.

Regarding Applicant's arguments concerning Aberg failing to disclose as the first subset of UI elements is unselected, the first subset of UI elements are not displayed...and a second subset of UI elements are displayed according to the steps as performed for the first subset of UI elements, the Examiner respectfully disagrees.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Aberg discloses a mobile telephone that allows user to create dynamic menus. Thus, user is capable of selectively adding/removing menu items sub-level menu to form subsets of frequently used and easily accessible menu items. Consequently, only the menu items selected and associated with the newly created sub-level menu are presented to user (see fig 3 where the dynamic menu 310 is shown; the sub-level menu contains menu items "Name Recall 211" from "Phonebook 200" and "Ring Type 117" from "Settings 100").

Regarding Applicant's arguments concerning Will failing to disclose that the first subset of UI elements are unloaded from memory upon being unselected, the Examiner respectfully disagrees.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Will discloses a cellular telephone capable of accessing a remote server database of menu items. In one embodiment of the invention, upon user request, the menu items stored on the server database can be transmitted to user's cellular phone (see col. 3, lines 6-16).

***Conclusion***

**6. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2174

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RASHAWN TILLERY whose telephone number is 571-272-6480. The examiner can normally be reached on M-F 8:30 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/RASHAWN TILLERY/  
Examiner, Art Unit 2174

/Adam L Basehoar/  
Primary Examiner, Art Unit 2178